The 2018 Scottie

 Written and edited by current and former players and coaches including Todd Garrison, Tyler Reid, Olivia Kiser, Anish Patel, Rajeev Nair, Garrison Page, Mason Reid, Parker Bannister, Daniel Dill.

Packet Eleven

TOSSUPS

1. **In Numbers 20, Moses' failure to perform this action caused God to ban him from entering Canaan. After being beaten three times, a prophet's donkey does this action, after which that prophet sees an angel. Besides Balaam's (*)** donkey, a bush does this action while burning, prompting Moses to remove his sandals. For 10 points, name this action which a serpent does in the garden of Eden to convince Eve to eat the forbidden fruit. (GP)
ANSWER: **talk**ing [accept **speak**ing or other equivalents; accept "talking to a rock" or equivalents before donkey]

2. **Art historian Dennis Phillips stated that the alternate title for Number 11, 1952 by Jackson Pollock causes viewers to focus too much on poles of this color. Wassily Kandinsky and Franz Marc have paintings titled [this color] (*)** rider and [this color] horses respectively, and are also the center of an art movement titled for this color. For 10 points, Pablo Picasso had a period named for this primary color that is between green and indigo on the rainbow. (TG)
ANSWER: **blue** [accept "blue poles" before color is mentioned]

3. **It's not *Lord of the Flies*, but this author's first novel is about a group of reform school boys' trials in a remote, plague-ridden village during World War II. In another book by this author, originally published in Japanese as "Football in the First Year of Man'en", Takashi leads a group in rebellion against a (*)** Korean called "the Emperor." For 10 points, name this Nobel winning author of *Nip the Buds, Shoot the Kids* and *A Silent Cry* who wrote of Bird and his mentally disabled son in *A Personal Matter*. (TG)
ANSWER: Kenzaburo **Oe**

4. **Bohemond of Taranto helped lead a siege at Antioch at this event in which Peter Bartholomew claimed to have discovered the "Holy Lance." Godfrey of Bouillon led forces at the Battle of Ascalon, which is considered the last battle of this conflict. This conflict was partially sparked by an appeal from Emperor Alexius I and was called for at the (*)** Council of Clermont. For 10 points, name this military expedition called for by Pope Urban II in which Europeans tried to retake the Holy Land. (RN)
ANSWER: **First Crusade** [prompt on "crusade(s)"; do not accept or prompt on other numbered crusades]

5. **In one interpretation of a DSC curve, this quantity is the analog of resistance. The Debye, Dulong-Petit, and Einstein models determine this quantity, and at lambda points it approaches infinity. Under isochoric conditions, this value equals the derivative of internal energy with respect to temperature. (*)** Water has a value of 4.148 joules per degree celsius for this quantity. For 10 points, name this quantity that is equal to the energy required to raise the temperature of a substance by one degree celsius. (MR)
ANSWER: **specific heat** capacity [or **heat capacity**]

6. **This philosopher argued that the presence of multiple religious groups prevents civil unrest in a letter addressed to an "Honoured Sir." In another work, this man defined knowledge as the perception of connections between ideas. In that work by this author of *A Letter Concerning Toleration*, this man argued that there are no (*)** innate ideas, and that at birth the mind is a blank slate, or "tabula rasa." For 10 points, name this English philosopher who wrote about the right to life, liberty, and estate in *Two Treatises of Government*. (TR)
ANSWER: John **Locke**

7. **In 1906, biologist Orator F. Cook coined the term for this phenomenon, which was demonstrated in a lab using a three-color maze and *Drosophila melanogaster*. This process often occurs due to genetic (*)** separation after natural disasters. Perhaps the best known example of this phenomenon is the finches on the Galapagos Islands. For 10 points, name this process, which occurs in allopatric and sympatric forms, in which a population evolves into distinct species. (MR)
ANSWER: **speciation**

8. **The first Roberts commision placed much of the blame for this event on Husband Kimmel and Walter Short. This event was codenamed Operation Z and prior to it the Hull note was delivered. The phrase "Climb Mount Niitaka" began this (*)** attack that targeted the Hickam and Wheeler airfields and the phrase "Tora, Tora, Tora" was relayed following it. For 10 points, name this December 7th, 1941 surprise Japanese attack on a Hawaiian naval base. (RN)

ANSWER: Attack on **Pearl Harbor**

9. **Four versions of this painting were created by its artist, and several versions of it with unique colors were created by Rupert Jasen Smith and Andy Warhol. Two figures walk along a bridge on the left of this painting, which was part of its artist's *Frieze of Life* series. The background of this work features a** swirling red sky, which may have been inspired by the eruption of Krakatoa. For 10 points, name this painting depicting a man grabbing his face and performing the title action, created by Edvard Munch. (TR)
ANSWER: *The **Scream** of Nature* [or ***Skrik***; or ***Der Schrei der Natur***]

10. **In the most recent book by this author, *The Golden House,* a man from Bombay moves with his three sons to Manhattan. In an autobiographical work, this author traces his time spent living as Joseph Anton, after having a (*)** fatwa issued against him. His novel that precipitated that fatwa opens with a plane explosion over the English Channel. For 10 points, name this author of *The Satanic Verses* and *Midnight's Children.* (OK)
ANSWER: Salman **Rushdie**

11. **This person's principle of least time led to the formation of Snell's law. One of his theorems states that a number to a prime power P equals a multiple of that number modulo P. Another of his theorems states that no three integers satisfy the equation (*)** $a^n + b^n = c^n$ [a to the n plus b to the n equals c to the n], when n is greater than two. Those are his ¨little¨ and ¨last¨ theorems, respectively. For 10 points, name this French mathematician and lawyer. (GP)
ANSWER: Pierre de **Fermat**

12. **Scottish janitor James Croll helped to develop a theory of climate change based largely on this substance. The dwarf planet Pluto has dunes of methane in this form, and the super-ionic form of this substance has a melting point of almost (*)** 5000 degrees celsius. At the Martian poles, this thing is made of CO2, meaning it is the "dry" type. For 10 points, name this solid that is often found in large caps at the poles of planets. (MR)
ANSWER: **ice**

13. **A novel by this author focuses on a character who finds himself overcome by a "sweetish sickness" and encounters the self-taught man. A play by this author is a modern retelling of the Electra myth, and features Zeus as the god of "[the title animals] and death". This author of (*)** *The Flies* and *Nausea* is perhaps more famous for a play in which Joseph Garcin comes to the conclusion that "hell is other people." For 10 points, name this 1964 Nobel Laureate who tried to refuse the prize, the French author of *No Exit.* (OK)
ANSWER: Jean-Paul **Sartre**

14. **In 1707, an infestation of flies became so bad in this city that "people's feet made as full an impression on them as upon thick snow." The world's first underground railroad was opened in this city in 1863. A regulation passed in 1722 to ease congestion on this city's namesake (*)** bridge may be the reason citizens in its country drive on the left. The Clean Air Act of 1956 was passed after a great fog in this city was responsible for up to 12,000 deaths. For 10 points, name this capital of the United Kingdom. (TG)
ANSWER: **London**

15. **This man was prevented from attending the Bandung conference by the U.S. government, and he chaired the Peace Information Center, which sought a worldwide ban on nuclear weapons. This author of the *Philadelphia Negro* opposed the views of (*)** Booker T. Washington and helped found the NAACP. He also founded the Niagara Movement and claimed that the "talented tenth" of blacks should receive a classical education. For 10 points, name this African-American sociologist and author of *The Souls of Black Folk*. (RN)
ANSWER: W.E.B. **Dubois**

16. **Julia Ward Howe read a poem about this man at the 100th anniversary of his birth in his namesake Symphony Hall in Boston. In one poem, this man "walks, and will not rest" while in another poem the same author wishes that he "might rouse [this man] in you all!"** "**And the (*)** great star early droop'd in the western sky in the night" is a reference to this man's death by the author of *Drum-Taps*. For 10 points, Vachel Lindsey's *[This man] Walks at Midnight* and Walt Whitman's *When Lilacs Last in the Dooryard Bloom'd* mourn the death of this assassinated President.(TG)
ANSWER: Abraham **Lincoln**

17. **This person performed "Nessun dorma" from Giacomo Puccini's opera *Turandot* at the 40th Grammy Awards. At Martin Luther King Jr's funeral, this performer sang "Precious Lord, Take My Hand," and at President Obama's inauguration in 2009, she sang "My Country 'Tis of Thee." (*)** Carole King wrote one of the songs this singer is most famous for, and she has had twenty number one R&B singles. For 10 points, name this "Queen of Soul" known for singing "R.E.S.P.E.C.T." and "A Natural Woman."(TG)
ANSWER: Aretha **Franklin**

18. **A Disneyland Park was constructed using reclaimed land on Lantau Island in this place. The tallest mountain in this place is Victoria Peak, and this territory is home to the most skyscrapers in the world. I.M. Pei's Bank of (*)** China Tower is located in this place, which is a global financial hub. For 10 points, name this special administrative region of southern China that was once owned by Great Britain. (PB)

ANSWER: **Hong Kong** [or **Xiang Gang**]

19. **This composition's title refers to a collection of over one thousand songs and poems from medieval times that were found in Bavaria. "In Spring," "In the Tavern," and "Court of Love" are three sections of this piece, which opens and closes with a movement about the inevitability of (*)** Fate. For 10 points, name this so called "scenic cantata" by Carl Orff whose intro "Oh Fortuna" has been featured in dozens of movies and other media. (TG)
ANSWER: ***Carmina Burana***

20. **This man once compared Spain's Jose Maria Aznar to Hitler. After the failure of Operation Zamora, this leader spent time in the San Carlos stockade and Yare Prison. This leader of the Fifth Republic Movement founded the (*)** PSUV after a political merger in 2007. Despite receiving treatments in Cuba in 2011, this man developed both advanced colon cancer and respiratory infections. For 10 points, name this former president of Venezuela, who died in 2013. (AP)
ANSWER: Hugo **Chavez**

BONUSES

1. For 10 points each, answer the following about the Mughal Empire. (RN)
[10] The Mughal empire was founded by this man, who defeated Ibrahim Lodi at the First Battle of Panipat.
ANSWER: Zahiruddin Muhammad **Babur**
[10] This grandson of Babur also ruled the Mughal Empire. He espoused religious toleration and was victorious at the Second Battle of Panipat.
ANSWER: **Akbar** the Great
[10] Akbar created this syncretic religion which primarily took elements form Hinduism and Islam.
ANSWER: **Din-i-Ilahi**

2. This dance's name comes from a Spanish word for "party". For 10 points each:
[10] Name this Latin dance with sensuous hip movements. It is accompanied by music with plenty of percussion using claves and congas.
ANSWER: **rumba**
[10] The most well-known rumba style came from African traditions in the neighborhoods of Matanzas and Havana in this country.
ANSWER: **Cuba**
[10] Enrique Jorrin composed music that led to the development of this other Cuban dance that takes its name from the sound made by the dancer's shoes when doing a triple step.
ANSWER: **cha-cha**-cha

3. The title character of this novel is tricked into marriage by Arabella Donn, who soon flees to Australia. For 10 points each:
[10] Name this novel in which Sue Bridehead leaves her husband to live with the title man, who works as a mason.
ANSWER: ***Jude the Obscure***
[10] *Jude the Obscure* was written by this author. He also wrote such works as *Tess of the d'Urbervilles* and *Far from the Madding Crowd*.
ANSWER: Thomas **Hardy**
[10] *Jude the Obscure* is set in Christminster, which is part of this fictional section of England created by Thomas Hardy. He also set his novel *The Mayor of Casterbridge* in this area.
ANSWER: **Wessex**

4. For 10 points each, answer the following about Pascal's Triangle. (TG)
[10] The triangle was developed to help find the coefficient of powers of these polynomials with two terms.
ANSWER: **binomials**
[10] If you shade in all of the odd numbers in Pascal's triangle, you get an image that is similar to this well-known triangular fractal named after a Polish mathematician.
ANSWER: **Sierpinski's** triangle
[10] If you treat the numbers in each row of Pascal's triangle as digits and read each row as a single number, the first five rows are powers of this number.
ANSWER: **eleven**

5. For 10 points each, answer these questions about the Philippines. (PB)
[10] This city, which is home to Rizal Park and Fort Santiago, is the capital city of the Philippines.
ANSWER: **Manila**
[10] The Philippines is home to this Unesco World Heritage Site, which receives its name from the brown color that the grass turns into during the dry season.
ANSWER: **Chocolate Hills**
[10] This current President of the Philippines is the oldest person to hold that office. He is controversial for his harsh punishments for criminals.
ANSWER: Rodrigo **Duterte**

6. This character chauffeurs the communist Jan and his girlfriend around Washington Park. For 10 points each: (GP)
[10] Name this character who is sentenced to death after accidentally suffocating Mary Dalton and then stuffing her in a chimney.
ANSWER: **Bigger** **Thomas** (accept either)
[10] Bigger Thomas is the protagonist of this novel by Richard Wright. James Baldwin later wrote "Notes on" this work.
ANSWER: *Native Son*
[10] This memoir by Wright details his life in two sections: his youth spent in the South and his early adult years in Chicago, where he joins the Communist party.
ANSWER: *Black Boy*

7. Bonnie Prince Charlie's victory at the Battle of Falkirk Muir was the last success for this movement. For 10 points each: (TG)
[10] Name this group that attempted to restore the British throne to the house of Stuart.
ANSWER: The **Jacobites** [accept other word forms]
[10] The downfall of the Stuart's began with the overthrow of this last Catholic British monarch by William III, Prince of Orange, and his wife Mary II.
ANSWER: **James II** [accept **James VII** of **Scotland**; prompt on "James"]
[10] The deposing of James in the Glorious Revolution of 1688 was precipitated in part by this pair of announcements that allowed people to worship as they saw fit and no longer required adherence to the Church of England.
ANSWER: **Declaration of Indulgence** [accept **Declaration for Liberty of Conscience**]

8. Grete's family wants her to learn violin, but she can't because of her brother's condition. For 10 points each: (GP)
[10] Name this novella in which Gregor Samsa goes through the title change to become a "monstrous vermin".
ANSWER: The ***Metamorphosis***
[10] This German-language Jewish author of *The Trial* and *The Castle* also wrote *The Metamorphosis*
ANSWER: Franz **Kafka**
[10] In this Kafka short story, the title performer joins the circus and is placed next to animal cages before admitting he never found a food he enjoyed.
ANSWER: A ***Hunger Artist*** [or **Ein Hungerkünstler**]

9. This researcher's most famous experiments were initially intended to analyze saliva and salivary glands. For 10 points each: (OK)
[10] Name this Russian scientist, who discovered that the dogs involved in his experiments would salivate at the sound of a bell even when no food was produced.
ANSWER: Ivan **Pavlov**
[10] The pairing of a neutral stimulus with a biologically potent one is known as this type of conditioning.
ANSWER: **classical** conditioning
[10] Pavlov won this prize in 1904 for his work on the physiology of digestion. Other winners of this award include Barbara McClintock and Alexander F. Fleming.
ANSWER: **Nobel** Prize in **Medicine** [or **Nobel** Prize for **Physiology** or **Medicine**]

10. Answer some questions about everyone's favorite electronic-classical fusion artist, Lindsey Stirling. For 10 points each:(TR)

[10] Stirling started her career on YouTube before competing on this NBC show. This show features acts of all varieties competing for a million dollars and the chance to headline a show in Las Vegas.

ANSWER: *America's Got Talent* [or *AGT*]

[10] Stirling's live performances typically involve her dancing while playing this instrument, which is challenging due to its chinrest. This instrument's most renowned classical player is Paganini.

ANSWER: **violin**

[10] In 2015, Stirling was featured in this magazine's "30 Under 30" in music. Some of this business magazine's other lists include the *400 Richest Americans* and *The World's Billionaires*.

ANSWER: *Forbes*

11. This field has propositional and modal varieties, and has been studied by numerous philosophers from Aristotle to Kurt Godel. For 10 points each: (TR)

[10] Name this philosophical branch concerned with consistency and validity.

ANSWER: **logic**

[10] This is the process used in most logical arguments. This form of reasoning is often contrasted with inductive reasoning.

ANSWER: **deductive** reasoning [or **deductive** logic; or logical **deduction**]

[10] In *An Investigation of the Laws of Thought*, this logician proposed a mathematical foundation for logic centering on conjunctions, disjunctions, and negations. His namesake "algebra" is fundamental to computer science.

ANSWER: George **Boole**

12. This type of bond typically results between a metal and a nonmetal. For 10 points each: (GP)

[10] Name this type of chemical bond, which results from a difference in electronegativity between charged atoms. Sodium Chloride has this type of bond.

ANSWER: **ionic** bonds

[10] Unlike ionic bonds, covalent bonds are formed from the sharing of electrons between atoms. This strongest type of covalent bond occurs in single bonds and results from the head-on overlap of orbitals.

ANSWER: **sigma** bonds

[10] Covalent bonds are present in these types of compounds, which exhibit a resonance known as aromaticity. Benzene is an example of this type of structural compound.

ANSWER: **cyclic** compound [accept **ring** compound]

13. This god owns the belt Megingjord and the goats Tanngrisnir and Tanngnjostr pull this god's chariot. For 10 points each: (MR)

[10] Name this Norse god of Thunder and son of Odin.

ANSWER: **Thor**

[10] Thor really had a thing for killing these beings who lived in Svartalfheim. He kicked one of these beings into a funeral pyre, and tricked another into turning to stone.

ANSWER: **Dwarves**

[10] Thor will kill and be killed at Ragnarok by this giant snake who circles the realm of humans.

ANSWER: **Jormungandr** [or **Midgard Serpent**]

14. For 10 points each, name these World War II battles from the Pacific Theatre. (RN)

[10] This battle is often considered the turning point of the Pacific front. In this battle, American Forces led by Chester Nimitz inflicted a crippling blow to Japanese naval power due to the work of American codebreakers.

ANSWER: Battle of **Midway**

[10] This naval battle was the first ever battle between aircraft carriers and occurred off the coast of New Guinea. Although considered a tactical victory from Japan, the Japanese were prevented from invading Australia.

ANSWER: Battle of **Coral Sea**

[10] This battle saw the first instances of Kamikaze attacks by the Japanese and is considered the largest naval battle of World War II. It consisted of several battles near a namesake gulf in the Philippines.

ANSWER: Battle of **Leyte Gulf**

15. In this painting, the title soldier is laying in a Christ-like manner, while a Native American squats in a pose similar to Rodin's *The Thinker*. For 10 points each: (TG)

[10] Name this painting that depicts the French commander who lost the Battle of Quebec during the French and Indian War.

ANSWER: ***The Death of General Wolfe***

[10] *The Death of General Wolfe* was a work of this artist who was appointed as "historical painter of the court" by King George III.

ANSWER: Benjamin **West**

[10] This American artist and so called "Painter of the American Revolution" studied under West while in London. His best known works are *The Declaration of Independence* and *The Surrender of Lord Cornwallis*.

ANSWER: John **Trumbull**

16. Identify these ancient sculptures, for 10 points each: (SK/TR)
[10] Created by Phidias around 435 BC, this Wonder of the Ancient World stands 13 meters tall and depicts the king of the Greek gods.
ANSWER: **Statue of Zeus** at Olympia
[10] This depiction of the Greek goddess Nike is lacking several body parts, notably a head and both arms. It was created around the 2nd century BC and is currently housed in the Louvre.
ANSWER: **Winged Victory** of Samothrace [or **Nike of Samothrace**]
[10] A depiction of the Greek goddess of love, this statue is known for its lacking two upper body limbs. It was created by Alexandros of Antioch out of marble.
ANSWER: **Venus de Milo** [or **Aphrodite of Milos**]

17. This religious reformer opposed Martin Luther at the Marburg Colloquy. For 10 points each: (RN)
[10] Name this Swiss Protestant Reformer and author of *On The True and False Religion*.
ANSWER: Huldrych **Zwingli**
[10] Zwingli opposed Luther by believing that this rite was merely symbolic and that Christ was not present during its performance.
ANSWER: the **Eucharist** [accept Holy **Communion**; accept the **Lord's Supper**]
[10] Zwingli also believed that there was no scriptural basis for adult baptism, which caused him to oppose this sect of sixteenth-century Protestants with origins in the Radical Reformation.
ANSWER: **Anabaptists**

18.The elastic type of this quantity can be found by the expression one half times k times x squared. For 10 points each: (MR)
[10] Name this type of energy, which also has a gravitational form.
ANSWER: **potential** energy
[10] In the equation of elastic potential energy, the letter k represents this constant. It is also found in Hooke's law.
ANSWER: **spring** constant
[10] For a force vs. displacement diagram, the elastic potential energy can be found by performing this operation.
ANSWER: **integration**

19. This process is used to detect specific sequences of DNA in a sample. For 10 points each:(MR)

[10] Name this process named after a British biologist, not a cardinal direction.

ANSWER: **Southern Blot**

[10] These enzymes are used to cut DNA at specific locations. They include enzymes such as EcoR1.

ANSWER: **restriction** enzymes [or **endonuclease**s]

[10] The Northwestern blot is used to detect how RNA interacts with these macromolecules. They are made of amino acids.

ANSWER: **proteins**

20. For 10 points each, answer these questions about classic Chinese literature. (GP)

[10] Three characters in this novel by Luo Guanzhong take the Oath of the Peach Garden. It describes the warring period between the Wei, Shu, and Wu states

ANSWER: ***Romance of the Three Kingdoms***

[10] In this other classic, the corrupt official Gao Qiu is opposed by a group of 108 bandits known as the "stars of destiny."

ANSWER: ***Water Margin*** [or ***Outlaws of the Marsh***; or ***All Men are Brothers***]

[10] *Water Margin* is set during the era of this Chinese dynasty. The invention of movable type printing during this dynasty led to the flourishing of literature and knowledge.

ANSWER: **Song**